

REMARKS

Claims 1-16, 20-25 and 30 are now pending in the application. Claims 1-16 stand rejected. Claims 20-25 stand objected to. Claims 17-19 and 26-29 have been cancelled. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-9 and 11-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bateman (U.S. Pat. No. 4,312,042) in view of Lowe et al. (U.S. Pat. No. 5,673,018), Kokubu (U.S. Pat. No. 4,782,256), Oudet et al. (U.S. Pat. No. 6,043,645), Turner (U.S. Pat. No. 6,498,474), Riesenbergs et al. (U.S. Pat. No. 3,949,252), Wade (U.S. Pat. No. 5,955,972) and Nysen (U.S. Pat. No. 6,259,991). This rejection is respectfully traversed.

1. Regarding Claims 1-7, as amended, Claim 1 recites, "A method for monitoring a performance characteristic of a wheel of a mobile platform, the method comprising: using rotation of the wheel during operation of the mobile platform to impart motion to an electric current generating device being carried on the wheel, to thus generate an electric current; using said electric current to power a wheel performance characteristic sensor, that in turn senses a wheel performance characteristic and provides a real time signal indicative of the wheel performance characteristic; communicating said signal via wireless signals to a receiver located on the mobile platform remotely from the wheel; and using said wireless signals to communicate to said receiver mapping information and an identity marker used to specifically identify a positional location of said wheel within a larger plurality of said wheels, by disrupting the wireless signal.

Neither Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergs et al., Wade or Nysen describe, show or suggest a method of monitoring a performance characteristic of a wheel of a mobile platform as recited in amended Claim 1.

For example, neither Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergs et al., Wade or Nysen describe, show or suggest a method for monitoring a performance characteristic of a wheel of a mobile platform that includes utilizing current

generated by a current generating device carried on the wheel to transmit a wireless signal used communicate mapping information and an identity marker, used to specifically identify a positional location of the wheel within a larger plurality of wheels, to a remotely located receiver by disrupting the wireless signal.

Rather Bateman describes a weight and balance system for an aircraft that measures the bend in a structural member of the landing gear by use of inclinometers mounted to the structural member.

Lowe et al. describes a system that uses a rotation sensor and an RF transponder to accumulate and transmit information on the distance traveled by a wheeled vehicle to an exciter/receiver. Both the rotation sensor and the transponder are preferably mounted directly on the wheel. Figures 4 and 5 illustrate a preferred mounting scheme for the transponder in which the rotation sensor 30 is mounted on an axle 66 and the transponder is mounted on or near the rotation sensor 30.

Kokubu describes an electricity generator attached to a hubcap. Thus, neither Bateman, Lowe et al. or Kokubu describe, show or suggest a wireless aircraft landing gear monitoring system having a wireless hubcap transceiver mounted to a hubcap of a wheel of a landing gear. Nor does Bateman, Lowe et al. or Kokubu describe, show or suggest a wireless aircraft landing gear monitoring system that further includes a wheel speed sensor mounted to the hubcap and a distant transceiver adapted to acquire and store mapping data pertaining to a positional location of the hubcap transceiver within the landing gear.

Oudet et al. describes a position sensor featuring a stator defining an air gap inside of which a mobile magnet moves. The sensor measures variation of induction in an air gap.

Turner describes a rotational sensor system for detecting rotational velocity and direction of a rotation member, such as a vehicle axle.

Riesenberg et al. describes a wheel hub cap that includes a stub shaft on which a stator is retained in fixed position with respect to the axle by a spring. The hub cap rotates with respect to the stator and carries a magnet pole rotor ring. The spring additionally provides electrical contact between an armature winding in inductive relationship with the rotor ring.

Wade describes an apparatus displaying landing gear status. The apparatus includes two light emitting diodes for each landing gear leg to display the current position of each gear leg.

Nysen describes a system that relies on a memory, for example an EEPROM memory, that includes a map used to correlate a particular identification code of an information device with its location. The code is correlated with the stored map to determine possible location which meets the received code.

Thus, Neither Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenberg et al., Wade or Nysen describe, show or suggest a wireless aircraft landing gear monitoring system as recited in amended Claim 1. The Office remarks that Wade discloses the use of mapping of wheel transceivers on the landing gear. Applicant respectfully submits that neither Wade nor any of the other cited references describe, show or suggest at least one distant transceiver adapted to wirelessly communicate with said hubcap transceiver and to acquire and store mapping data and an identity marker used to identify a positional location of said hubcap transceiver relative to the other wheels within the landing gear. In light of the amendment to Claim 1, as set forth above, if the Office maintains the rejection, Applicant respectfully requests that the Office specifically point out where in Wade acquiring and storing mapping data and an identity marker used to identify a positional location of a hubcap transceiver relative to other wheels within a landing gear is described.

Additionally, Applicant respectfully submits that a rejection based on a combination of eight references, when there is no motivation to combine such references, indicates that the invention as recited in amended Claim 1 is not obvious. It is well established that there must be some basis for concluding that a reference would

have been considered by one skilled in the art working on a problem to which the invention pertains for the teachings of a reference to be prior art under 35 U.S.C. 103. For no matter what the reference teaches, it could not have rendered the invention obvious, at the time the invention was made, to a person having ordinary skill in the art to which the subject matter pertains, unless the hypothetical person would have considered the reference. In re Horn, 203 USPQ 969 (CCPA 1979). Applicant respectfully submits that one skilled in the art would not have considered the eight cited references to construct the present invention as recited in amended Claim 1.

There is no suggestion in Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergen et al., Wade or Nysen to combine the features described in each respective piece of cited art to obtain the present invention as recited in amended Claim 1. It is well recognized that absent some teaching, suggestion or incentive supporting the combination of the cited references, obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to have selected an alternative design choice. Applicant submits that it would not have been an obvious matter of design choice to simply take each of the isolated teachings of Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergen et al., Wade and Nysen, where there is no suggestion or motivation to combine the teachings of these references, to construct the present invention as recited in amended Claim 1.

Further yet, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. It is furthermore impermissible to engage in hindsight reconstruction of the claimed invention, using the Applicant's structure as a template and selecting elements from references to fill the gaps. The references themselves must provide some teaching whereby Applicant's combination would have been obvious. Interconnect Planning, 227 USPQ 551. In this instance it appears that the Applicant's own disclosure has been used as a "roadmap" to piecemeal together the teachings of various references, i.e. seven references, where the references do not suggest the desirability or motivation of combining the references. Obviousness cannot be established by merely suggesting

that it would be obvious to one of ordinary skill in the art to have selected an alternative design choice.

For at least the reasons set forth above, Applicant respectfully submits that amended Claim 1 is patentable over Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergs et al., Wade and Nysen.

Claims 2-7 depend from amended Claim 1. When the recitations of Claims 2-7 are considered in combination with the recitations of amended Claim 1, Applicant submits that Claims 2-7 are likewise patentable over Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergs et al., Wade and Nysen.

2. Regarding Claims 8-15, Claim 8 has been amended, as set forth above, to include limitations similar to those recited in amended Claim 1. In accordance with the remarks set forth above with respect to amended Claim 1, Applicant respectfully submits that amended Claim 8 is patentable over Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergs et al., Wade and Nysen.

Claims 9 -15 depend from amended Claim 8. When the recitations of Claims 9-15 are considered in combination with the recitations of amended Claim 8, Applicant submits that Claims 9-15 are likewise patentable over Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergs et al., Wade and Nysen.

3. Regarding Claims 16 and 20-25, Claim 16 has been amended, as shown above, to include the limitations recited in Claim 19 and intervening Claims 17 and 18. Applicant gratefully acknowledges that Claim 19 is considered by the Office to contain allowable subject matter. Particularly, the Office comments that Claim 19 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Therefore, Applicant submits that amended Claim 16 is patentable over Bateman, Lowe et al. or Kokubu, Oudet et al., Turner, Riesenbergs et al., Wade and Nysen.

Claims 20-25 depend from amended Claim 16, which has been submitted to be patentable over the cited references. Additionally, Applicants gratefully acknowledge

that Claims 20-25 are considered by the Office to contain allowable subject matter. Therefore, based on the amendments to Claim 16 and allowable subject matter contained in Claims 20-26, Applicant respectfully submits that Claims 20-25 are presented in allowable condition.

For at least the reasons set forth above, Applicant respectfully requests that the §103 rejections of Claims 1-9 and 11-16 be withdrawn.

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bateman (U.S. Pat. No. 4,312,042) in view of Lowe et al. (U.S. Pat. No. 5,673,018), Kokubu (U.S. Pat. No. 4,782,256), Oudet et al. (U.S. Pat. No. 6,043,645), Turner (U.S. Pat. No. 6,498,474), Riesenbergr et al. (U.S. Pat. No. 3,949,252), Wade (U.S. Pat. No. 5,955,972), Nysen (U.S. Pat. No. 6,259,991), Trombly (U.S. Pat. No. 4,031,449) and Weimer et al. (U.S. Pat. No. 5,805,113). This rejection is respectfully traversed.

Claim 1 depends from amended Claim 8, which, in accordance with the remarks set forth above, Applicant respectfully submits is patentable over the cited references. Thus, when the recitations of Claim 10 are considered in combination with the recitations of amended Claim 8, Applicant submits that Claim 10 is patentable over the Bateman, Lowe et al., Kokubu, Oudet et al., Turner, Riesenbergr et al., Wade, Trombly and Weimer et al.

ALLOWABLE SUBJECT MATTER

Applicant gratefully acknowledges that the Office states that Claims 19-25 would be allowable if rewritten in independent form. As set forth above, Applicant has amended Claim 16 to include the limitations of Claim 19 any intervening claims. Therefore, Claims 16 and 20-25 should now be in condition for allowance.

Additionally, Applicant gratefully acknowledges that the Office considers Claim 30 to be allowed over the prior art.

CONCLUSION

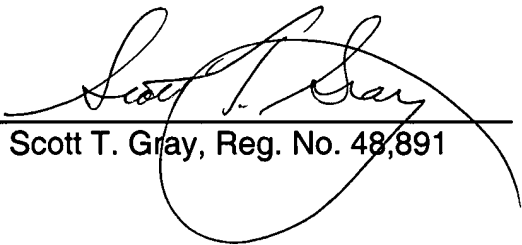
It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests

that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7525.

Respectfully submitted,

Dated: 8/30/04

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